Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

VARIOUS.

Inside an Abyssinian Church.

Dr. Blanc in an interesting series of papers on Abyssinia in the *British Medical Journal,* writes: — Except in the province of Tigré, all the churches in Abyssinia are circular, the walls generally of mud and stone, the roof conical and thickly covered with straw. The church proper consists of three concentric circles; — the first a kind of verandah, wherein the congregation assembled; the second the church itself, where the priests perform their ceremonies; the third, or innermost circle, the "Holy of Holies", containing the sacred vase and the "Tabot," a small square piece of wood, having on one side a cross, on the other three stars, symbols of the Trinity, and on which are carved the name of the church, and that of the bishop by whom it was consecrated. The verandah is, for the stranger, the most interesting portion of the edifice. In some, like "Medani Alum" (Saviour of the world) the church we visited that day, the paintings that adorn the walls, all considering, are not badly made. St. George and the dragon in the church of Medani Alum held a prominent and conspicious place; next came the Twelve Apostles and the Trinity, God being represented in the form of a benevolent looking old gentleman. Several representations of our Lord's sufferings graced the walls.

To Color-Stain Dried Grass.

There are few prettier ornaments, and none more economical and lasting, than bouquets of dried grasses, mingled with the various gnaphalia, or unchangeable flowers. They have but one fault; and that is, the want of other colors besides yellow or drab or brown. To vary their shade artificially, these flowers are sometimes dyed green. This however is in bad taste, and unnatural. The best effect is produced by blending rose and red tints, together with a very little pale blue, with the grasses and flowers, as they dry naturally. The best means of dyeing dried leaves, flowers and grasses, is simply to dip them into the spirituous liquid solution of the various compounds af aniline. Some of these have a beautiful rose shade; others a red, blue, orange, and purple. The depth of color can be regulated by diluting, if necessary, the original dyes with methyl or spirit down to the shade desired. When taken out of the dye they should be exposed to the air to dry off the spirit. They then require arranging, or setting into form, as, when wet, the petals and fine filaments have a tendency to cling together, which should not be. A pink saucer, as sold by most druggists for sixpence, will supply enough rose dye for two ordinary bouquets. The druggists also supply the simple dyes of various colors, at the same cost. The pink saucer yields the best rose dye. By washing it off with water and lemon juice, the aniline dyes yield the best violet, mauve and purple colors.

S. Piesse.

Coating Castings with Gold and Silver.

Gilding. — Gilding cast iron by means of gold amalgam is very difficult, as the amalgam does not adhere to the iron. It is therefore necessary to brush the well-cleaned surface of the iron with a concentrated solution of copper vitriol, and to apply the the amalgam to precipitated copper. As under certain circumstances the coating of copper is injurious, Böttger coats the articles direct with mercury by means of the elective, positive zinc in the following manner: The article to be gilded is well cleaned and boiled in a porcelain vessel together with 12 parts of mercury, 1 part of zinc, 2 parts of iron vitriol, $1^{1}/_{2}$ parts of muriatic acid of 12 specific gravity, and 12 parts of water; in a short time a layer of mercury will deposit upon the iron, and upon this the gold amalgam may be uniformly distributed.

The gilding may also be effected upon polished iron in the following manner: If a nearly neutral solution of chloride of gold be mixed with sulphuric ether and agitated, the ether will take up the gold and float above the denser liquid. When this auriferous ether is applied by a camel-hair pencil to brightly polished iron or steel, the ether evaporates and the gold adheres. It is fixed by polishing with a burnisher. This gilding is not very rich or durable; in fact the affinity between gold and iron is feeble compared to that between gold and copper or silver.

Gilding of cast iron by the galvanic way is also difficult, and is successful only if the article is perfectly clean. It is advisable previously to coat the article with copper or silver.

Polished iron may also be gilded with heat by gold leaf.

Silvering Cast Iron. — Iron to be silvered is first provided with a coating of copper, upon which the silver is applied either by means of amalgam or silver leaf.

Cast iron can be well silvered by the galvanic way without a previous coppering.

Practical Treatise on Metallurgy.

Modern Iron Work.

At the last Paris International Exhibition, a pair of iron gates, by Messrs. Barnard, Bishop, and Bernards of Norwich, attracted the notice of most visitors, by their colossal size, by the elaborate and beautiful character of the design, and by the skill with which the workman's hammer had wrought it out. An examination of those gates naturally led to the inference that if the manufacturers were afforded another opportunity of producing a work of the same kind, it would reflect equal, if not greater, credit upon them. In the summer of last year this great firm of iron workers received a commission from the Government of Buenos Ayres to furnish a series of ornamental gates and connecting railings for the purpose of enclosing the area covered by the station and a certain portion of the railway: the order is now completed, and is already on its way to the River Plate. The gates for the principal entrance to the station are the subject of the annexed engraving. They are about 14 feet wide, by 11 feet in height; the lower panels are filled with a design suggested by the hawthorn, which, with the rose and oak, is the type of the whole ornamentation. The plan of the piers is oblong, the sides and backs being filled with the same ornamental designs as the front; wings to match complete the set, which occupies an arch in front of the station. Without any attempt at overmuch elaboration, the richness of the design is most striking, and at the same time is characterised by good taste: the merit must be given to Mr. Alfred Barnard, one of the younger members of the firm, who originated and superintended the execution of the whole work: it is entirely of wrought iron. *Art Journal.*

The Tomb of Henry VII.

The well known central monument in the chapel of Henry VII., Westminster Abbey, has been cleansed and revived. The tomb itself is seen to be of black marble; the effigies and other metal adjuncts are gilt. The gilding is for the most part in an excellent state of preservation, the subjects of the sculptured groups in the circular panels round the tomb are now obvious, and the inscription is legible. The dark metal screen around the tomb would prevent its newly-restored brigthness from interfering with the sombre harmony of the chapel as a whole, even were that brightness more glaring than it is. It was a decidedly desirable work to do. Nothing has yet been done to the screen; but doubtless it will be cleaned and the small portions that are gilt brought out. Looking at the tolerably complete appearence of the monument at first sight, it is somewhat startling to hear that 1,500 pieces are wanting to make it perfect; yet such we believe is the case.

The Builder.